Abstract:

PURPOSE OF REVIEW: Central venous catheter (CVC)-associated bloodstream infections (CLABSIs) result in poorer patient outcomes and increased healthcare costs. Reduced reimbursement for CLABSI events is now provided for hospitalized patients in the United States. Although a zero target is proposed, the feasibility has not been evaluated. The objective of this review is to identify factors contributing to CLABSI and determine whether current evidence supports attainment of a zero infection rate.

RECENT FINDINGS: Limitations of current surveillance methods and reporting of aggregate data impact on achieving target CLABSI rates. Standard prevention practices, including physician and patient preparation (e.g. hand hygiene), are frequently incorporated into bundles of care. CVC dwell time has been identified as means of risk stratification. Additional strategies (e.g. chlorhexidine-impregnated dressings, antimicrobial-coated devices) may be better used in patients with expected long dwell times. Non-ICU populations are increasingly targeted with prevention strategies, but expected rates of infection have not been proposed.

SUMMARY: A zero CLABSI rate should be the target only for ICU populations having CVCs with a dwell time of 1-9 days following aseptic insertion. Additional measures should be reserved
for patients with expected longer dwell time. Refinement and validation of surveillance methodology is required before target CLABSI rates can be proposed for non-ICU populations.